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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,429	12/08/2003	David S. Benco	LUC-449/Benco 51-38-38-47	2312
32205	7590	03/30/2006	EXAMINER	
CARMEN B. PATTI & ASSOCIATES, LLC ONE NORTH LASALLE STREET 44TH FLOOR CHICAGO, IL 60602			RAMPURIA, SHARAD K	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,429	<b>Applicant(s)</b> BENCO ET AL.	
	<b>Examiner</b> Sharad Rampuria	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

- I. The current office-action is in response to the amendment/arguments filed on 1/13/06.

Accordingly, Claims 1-15 are pending for further examination as follows:

***Claim Rejections - 35 USC § 103***

- II. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- III. Claims 1-4, 7-8, & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin [US 20040198360] in view of Rosenberg [US 20020102973].

As per claim 1, Kotzin teaches:

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A method for selecting, by a mobile terminal, (10; Fig.1) a roaming service provider in a telecommunications network, when the mobile terminal is roaming, (Abstract) the method comprising the steps of:

Communicating between a mobile terminal and current roaming service providers for a current location of the mobile terminal; (i.e. monitor service...network parameters; 0021; Pg.2)

Selecting, based on the received roaming service provider information, a respective one of the current roaming service providers; (i.e. subscriber...information...communication; 0022; Pg.2) and

Connecting subsequent call(s) associated with the mobile terminal using the selected respective roaming service provider. (i.e. engage communication; 0028; Pg.3 and Claim 1)

Kotzin doesn't teach explicitly, registering, by the mobile terminal, with each of the current roaming service provider; receiving, by the mobile terminal, respective roaming service provider information from each of the current roaming service providers in response to the registration. However, Rosenberg teaches in an analogous art, registering, by the mobile terminal, with each of the current roaming service provider; receiving, by the mobile terminal, respective roaming service provider information from each of the current roaming service providers in response to the registration; (i.e. if the mobile station determines that it is not in its home system, then at step S. 10 the SAL stored in *the mobile station will be accessed and searched to determine if a preferred network provider exists for the current communication system*. In accordance with an aspect of the present invention, the SAL stored in the mobile station may comprise a table of entries including the SIDs and corresponding frequency band(s) of all of the preferred service providers. The preferred service providers may correspond to

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cellular service providers that the mobile station's home system has a reciprocal agreement or billing arrangement with to provide service when the mobile station is roaming. Entries in the SAL may be provided for the SIDs associated with each region within which one or more preferred service providers exist (e.g., the SAL may include entries for one or more of the SIDs assigned in the North American cellular system). *If more than one preferred or target system exists for a given region, then the preferred systems in an SAL entry may be listed in order of preference and/or the air interface technology may be provided for each preferred system so that the mobile station may select the most appropriate system for that region*; Pg.5-6; 0062, Pg.7; 0069-70, Abstract and Claim 1) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include registering, by the mobile terminal, with each of the current roaming service provider; receiving, by the mobile terminal, respective roaming service provider information from each of the current roaming service providers in response to the registration in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

As per claim 2, Kotzin teaches:

The method of claim 1 wherein the roaming service provider information is at least one of pricing, data rates, push to talk, signal strength. (i.e. monitoring of service provider network parameters; Pg.3; 0030)

As per claim 3, Kotzin teaches all the particulars of the claim except an incoming call and an outgoing call. However, Rosenberg teaches in an analogous art, that the method of claim 1

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wherein the subsequent call(s) associated with the mobile terminal is one of an incoming call and an outgoing call. (i.e. an incoming call and an outgoing call; Pg.6; 0068)

As per claim 4, Kotzin teaches all the particulars of the claim except the step of determining, upon detecting the registration message from the mobile terminal, if the mobile terminal has subscribed to the feature. However, Rosenberg teaches in an analogous art, that the method of claim 1, wherein the selecting, by a mobile terminal, of a roaming service provider in the telecommunications network, when the mobile terminal is roaming, is a feature of the telecommunications network, and wherein the method further comprises, the step of determining, upon detecting the registration message from the mobile terminal, if the mobile terminal has subscribed to the feature, and if the mobile terminal has not subscribed, then one of connecting the subsequent call(s) via a contracted roaming service provider or not connecting the subsequent call(s), and, if the mobile terminal has subscribed, proceeding to the step providing to the mobile terminal respective roaming service provider information. (i.e. an incoming call and an outgoing call; Pg.6; 0068)

As per claim 7, Kotzin teaches:

A method for selecting, by a mobile terminal, (10; Fig.1) a roaming service provider in a telecommunications network, when the mobile terminal is roaming, (Abstract) the method comprising the steps of:

Communicating between a mobile terminal and current roaming service providers for a current location of the mobile terminal; (i.e. monitor service...network parameters; 0021; Pg.2)

Selecting, at the mobile terminal and based on the displayed roaming service provider information, a respective one of the current roaming service providers; (i.e. subscriber...information...communication; 0022; Pg.2)

Communicating the selection of the respective current roaming service provider to the telecommunication network and tuning the mobile terminal to the selected roaming service provider; (i.e. engage communication; 0028; Pg.3 and Claim 1) and

Connecting, by the selected respective roaming service provider, subsequent call(s) associated with the mobile terminal. (i.e. engage communication; 0028; Pg.3 and Claim 1)

Kotzin doesn't teach explicitly, registering, by the mobile terminal, with each of the current roaming service provider; receiving, by the mobile terminal, respective roaming service provider information from each of the current roaming service providers in response to the registration. However, Rosenberg teaches in an analogous art, registering, by the mobile terminal, with each of the current roaming service provider; receiving, by the mobile terminal, respective roaming service provider information from each of the current roaming service providers in response to the registration; (i.e. if the mobile station determines that it is not in its home system, then at step S. 10 the SAL stored in *the mobile station will be accessed and searched to determine if a preferred network provider exists for the current communication system*. In accordance with an aspect of the present invention, the SAL stored in the mobile station may comprise a table of entries including the SIDs and corresponding frequency band(s) of all of the preferred service providers. The preferred service providers may correspond to cellular service providers that the mobile station's home system has a reciprocal agreement or billing arrangement with to provide service when the mobile station is roaming. Entries in the

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SAL may be provided for the SIDs associated with each region within which one or more preferred service providers exist (e.g., the SAL may include entries for one or more of the SIDs assigned in the North American cellular system). *If more than one preferred or target system exists for a given region, then the preferred systems in an SAL entry may be listed in order of preference and/or the air interface technology may be provided for each preferred system so that the mobile station may select the most appropriate system for that region*; Pg.5-6; 0062, Pg.7; 0069-70, Abstract and Claim 1) displaying the roaming service provider information at the mobile terminal; (i.e. inherent in display; 65; Fig. 2B). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include registering, by the mobile terminal, with each of the current roaming service provider; receiving, by the mobile terminal, respective roaming service provider information from each of the current roaming service providers in response to the registration in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

As per claim 8, Kotzin teaches all the particulars of the claim except an incoming call and an outgoing call. However, Rosenberg teaches in an analogous art, that the method of claim 7 wherein the subsequent call(s) associated with the mobile terminal is one of an incoming call and an outgoing call. (i.e. an incoming call and an outgoing call; Pg.6; 0068)

As per claim 11, Kotzin teaches all the particulars of the claim except the step of determining, upon detecting the registration message from the mobile terminal, if the mobile



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terminal has subscribed to the feature. However, Rosenberg teaches in an analogous art, that the method of claim 7, wherein the selecting, by a mobile terminal, of a roaming service provider in the telecommunications network, when the mobile terminal is roaming, is a feature of the telecommunications network, and wherein the method further comprises, the step of determining, upon occurrence of a call associated with the mobile terminal, if the mobile terminal has subscribed to the feature, and if the mobile terminal has not subscribed, then one of connecting the subsequent call(s) via a contracted roaming service provider or not connecting the call(s), and, if the mobile terminal has subscribed, proceeding to the step providing to the mobile terminal respective roaming service provider information. (i.e. an incoming call and an outgoing call; Pg.6; 0068)

IV. Claims 5, 9, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & Rosenberg further in view of Nelson [US 6470182].

As per claim 5, the above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, that the method of claim 1 wherein the method further comprises, using the selected respective roaming service provider for subsequent calls associated with the mobile terminal while the mobile terminal is within at least one cell of the selected respective roaming service provider. (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal .

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is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

As per claim 9, the above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, that the method of claim 7 wherein the method further comprises, using the selected respective roaming service provider for subsequent calls associated with the mobile terminal while the mobile terminal is within at least one cell of the selected respective roaming service provider. (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

As per claim 12, Kotzin teaches:

A system for allowing a mobile terminal to select a roaming service provider in a telecommunications network, when the mobile terminal is roaming, (Abstract) the system comprising:

A mobile terminal (10; Fig.1) that is operatively connected to a telecommunication network, the mobile terminal having a display (18; Fig.1, 0019; Pg.2)

A call controller in the telecommunication network for controlling a call for the mobile terminal; (i.e. CPU; 44; Fig.1, 0022; Pg.2)

Each of the roaming service providers having respective roaming service provider information; (0022; Pg.2) and

Respective roaming service module in a respective system of each of the service providers, the roaming service module operatively connected to at least the call controller; (0028; Pg.3 and Claim 1)

Kotzin doesn't teach explicitly, wherein, each current roaming service provider, upon detecting a respective registration message from the mobile terminal, sending in response to registration respective roaming service provider information that is associated with each of the current roaming service providers to the mobile terminal and displayed, wherein a respective one of the current roaming service providers is selected based on the displayed roaming service provider information, wherein the selection of the respective current roaming service provider is communicated to the telecommunication network and the mobile terminal is tuned to the selected roaming service provider; and wherein subsequent call(s) is connected to the selected respective roaming service provider. However, Rosenberg teaches in an analogous art, wherein, each current roaming service provider, upon detecting a respective registration message from the mobile terminal, sending in response to registration respective roaming service provider information that is associated with each of the current roaming service providers to the mobile terminal and displayed, wherein a respective one of the current roaming service providers is selected based on the displayed roaming service provider information, wherein the selection of the respective current roaming service provider is communicated to the telecommunication network and the mobile terminal is tuned to the selected roaming service provider; and wherein subsequent call(s) is connected to the selected respective roaming

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service provider; (i.e. if the mobile station determines that it is not in its home system, then at step S. 10 the SAL stored in *the mobile station will be accessed and searched to determine if a preferred network provider exists for the current communication system*. In accordance with an aspect of the present invention, the SAL stored in the mobile station may comprise a table of entries including the SIDs and corresponding frequency band(s) of all of the preferred service providers. The preferred service providers may correspond to cellular service providers that the mobile station's home system has a reciprocal agreement or billing arrangement with to provide service when the mobile station is roaming. Entries in the SAL may be provided for the SIDs associated with each region within which one or more preferred service providers exist (e.g., the SAL may include entries for one or more of the SIDs assigned in the North American cellular system). *If more than one preferred or target system exists for a given region, then the preferred systems in an SAL entry may be listed in order of preference and/or the air interface technology may be provided for each preferred system so that the mobile station may select the most appropriate system for that region*; Pg.5-6; 0062, Pg.7; 0069-70, Abstract and Claim 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include wherein, each current roaming service provider, upon detecting a respective registration message from the mobile terminal, sending in response to registration respective roaming service provider information that is associated with each of the current roaming service providers to the mobile terminal and displayed, wherein a respective one of the current roaming service providers is selected based on the displayed roaming service provider information, wherein the selection of the respective current roaming service provider is communicated to the telecommunication network and the mobile terminal is tuned to the

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selected roaming service provider; and wherein subsequent call(s) is connected to the selected respective roaming service provider in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

The above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, a plurality of service providers in the telecommunication network, each of the service providers having respectively at least one cell in which the service provider is operational (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

As per claim 13, the above combination teaches all the particulars of the claim except an incoming call and an outgoing call. However, Rosenberg teaches in an analogous art, that the system of claim 12 wherein the subsequent call(s) associated with the mobile terminal is one of an incoming call and an outgoing call. (i.e. an incoming call and an outgoing call; Pg.6; 0068)

As per claim 14, the above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, that the system of claim 12 wherein the selected respective roaming service provider is used for subsequent calls associated with the mobile

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terminal while the mobile terminal is within at least one cell of the selected respective roaming service provider. (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

V. Claims 6 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & Rosenberg further in view of Moore [US 20050020293].

As per claim 6, the above combination teaches all the particulars of the claim except re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. However, Moore teaches in an analogous art, that the method of claim 1 wherein the method further comprises re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. (Pg.3; 0021) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal in order to provide a method for re-selecting control channels in a mobile station reduces the use of resources by limiting an evaluation of candidate control channels to those channels which satisfy certain criteria and are deemed to be eligible control channels.

As per claim 10, the above combination teaches all the particulars of the claim except re-selecting a respective roaming service provider for each subsequent call associated with the

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mobile terminal. However, Moore teaches in an analogous art, that the method of claim 7 wherein the method further comprises re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. (Pg.3; 0021) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal in order to provide a method for re-selecting control channels in a mobile station reduces the use of resources by limiting an evaluation of candidate control channels to those channels which satisfy certain criteria and are deemed to be eligible control channels.

VI. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & Rosenberg, Nelson further in view of Moore.

As per claim 15, the above combination teaches all the particulars of the claim except re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. However, Moore teaches in an analogous art, that the system of claim 12 wherein a respective roaming service provider is re-selected for each subsequent call associated with the mobile terminal. (Pg.3; 0021) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal in order to provide a method for re-selecting control channels in a mobile station reduces the use of resources by limiting an evaluation of candidate control channels to those channels which satisfy certain criteria and are deemed to be eligible control channels.

***Response to Amendment***

VII. Applicant's arguments with respect to claims 1-15 has been fully considered but is moot in view of the new ground(s) of rejection.

***Conclusion***

VIII. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

IX. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5).



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or [EBC@uspto.gov](mailto:EBC@uspto.gov).

Sharad Rampuria  
Examiner  
Art Unit 2617

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER